

West Precinct, Perth Airport, WA

CLIENT Perth Airport Pty Ltd

YEAR 2017

SCOPE OF WORK

- Geotechnical investigation
- Interpretive analysis and reporting
- Sheet pile wall design
- Construction phase support



Completed DFO development within the West Precinct site.

West Precinct is a signature commercial, retail and hotel zone located on the western fringes of Perth Airport and incorporating Perth's first direct factory outlet (DFO). Douglas Partners assisted Perth Airport Pty Ltd and its stakeholders from desktop study to construction, proving consistent geotechnical advice and support to inform site development .

West Precinct is a 24 ha site located on the western edge of Perth Airport, between Tonkin Highway and Dunreath Drive. Historically a largely vacant area, the site forms a key part of the Perth Airport strategy to make better use of its outlying, unused land. The proposed full development incorporates hotels, offices, retail outlets, showrooms and restaurants.

Douglas Partners' involvement began at the very beginning of the project with a geotechnical desktop study, which used existing

information—including Douglas Partners' previous experience at the airport- to highlight the geotechnical risks and opportunities associated with the site. Some selected risks identified included the presence of uncontrolled fill, loose natural sand and shallow groundwater.

Subsequently, Douglas Partners undertook an intrusive geotechnical investigation of the overall site, which was targeted at quantifying the risks identified in the desktop study. Further targeted investigations were undertaken in parts of the site where geotechnical particularities were encountered during the initial field work, and for the location of a proposed waste water pump station, which was situated outside the site boundary.

As part of the design development of the site, Douglas Partners undertook detailed design of a proposed 4 m high sheet piled retaining wall, required to allow cutting of an access road near the site boundary. Douglas Partners worked closely with the civil and structural engineers engaged both by Perth Airport and by lot developers,

to provide advice on site preparation, subsoil drainage and foundation design.

Douglas Partners provided construction phase support during earthworks for the central part of the site, which was developed as Perth's first DFO outlet, providing timely and practical advice to the contractor.

"It was very pleasing to follow this iconic project through from feasibility to finished product, providing detailed input to assist a range of project partners at every stage."

*Paul Hutchinson
Project Manager*

